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DESCRIPTION OF A NEW SPECIES OF *LAGOMYS*  
FROM ALASKA.\*

BY E. W. NELSON.

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*Lagomys collaris* sp. nov.

THE COLLARED PIKA.

*Lagomys princeps* Nelson and True, Report upon Natural History Collections in Alaska, pp. 273, 274, 1887 (not Richardson).

Type collected about 200 miles south of Fort Yukon, Alaska, near the head of the Tanana river. No.  $\frac{1+384}{36297}$ . U. S. National Museum. Collected by E. W. Nelson, 1880. (Original No., 164.)

*Distribution*.—Mountains south of Fort Yukon, about the head of the Tanana river, to the Chigmit mountains, near the head of Bristol bay, Alaska.

Among the mammals secured by me in Alaska were three specimens of *Lagomys* which appear to belong to an undescribed species. They were obtained, at my request, through the kindness of Mr. L. N. McQuesten, from the mountains south of Fort Yukon, by the Indians of that district.

Mr. McQuesten informed me that the Indians report these animals as common everywhere in the highest ranges south of Fort Yukon, where they are usually found above timber line. From native accounts their habits appear to be identical with those of the more southern species. I showed the skins to a fur-trader who had lived for many years at Kolmakovsky Redoubt,

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on the Kuskokwim river; he recognized them at once, and told me that the species is common in all of the high mountains of the Alaskan range south of the Kuskokwim as far as the base of the peninsula of Alaska. In confirmation of this reported range are two skins, now in the United States National Museum, taken in the winter of 1882, in the Chigmit mountains near the head of Bristol bay, by Mr. McKay, which, though in shabby condition, appear to belong to the same species. The three skins secured by Mr. McQuesten were taken by the Indians during a summer hunt, and are presumably in summer pelage, although possibly taken in spring, before the molt.

The Chigmit Mountain specimens are in winter fur, and are much more ashy than those from the type locality.

The species thus has a known range from the high mountains south of Fort Yukon, in about latitude  $65^{\circ}$ , southwesterly to the vicinity of Bristol bay. Its northeast limit along this line coincides with the same limit of *Mazama montana*, and here occupies the southern part of the range of *Ovis dalli*. Its eastern extension remains a matter of uncertainty, but the type locality of Richardson's *L. princeps* makes it probable that *collaris* does not reach eastward to the mountains about the head-waters of the Mackenzie. That it does not range north of the Kuskokwim, along the course of that stream, was pretty definitely determined by my work in that region.

*Description.*—The dorsal surface, including top and sides of the head, is of a nearly uniform dark or grizzled-gray, with a dull yellowish wash on the crown and back. On the back and sides of the neck the yellowish wash is nearly or quite lacking, leaving a broad collar of dull iron-gray separating the yellowish-shaded areas of the head and back. This yellowish wash is much more apparent on the crown and middle of back and fades out at the sides, so that next the border of the white lower surface the color becomes ashy-gray. Just behind each ear is a small area of dull, light ashy. Below, a triangular white area occupies the entire chin and throat, with its apex in front. At each of the two posterior angles of this area is a yellowish spot forming a slight backward continuation of the light area of the throat at these points. These spots lie on the sides of the throat below and a little behind the ears. The white-throat area is well defined, and is succeeded by a distinct band of dull gray, which forms the lower part of the cervical collar. The remainder of

the lower parts are pure white, including the feet and legs, except only the smoky-brown fur on the soles of the hind feet. The fore feet and legs to well above their insertion are included within the pure-white area of the lower surface. The exposed portion of the interior of the ear-conch is covered with a strong growth of coarse hairs. These hairs are pale gray at base, shading into yellowish toward the distal third, and the remainder of tip shiny black. The distribution of the hairs is such that the colors form a distinct yellowish band across the middle of the ear, succeeded by a very distinct black bar that extends along the edge and, at first glance, appears to form a black band bordering the ear. A close examination, however, shows that behind this black bar the actual margin of the ear is very narrowly edged with pale grayish-white. The black bar is about 3 mm. in width, and is distinct in all the specimens examined. The under fur of the dorsal surface is slaty-black. Above this slaty-black area the longer hairs have a narrow band of pale gray shading into a broader zone of dull yellowish, followed by a distinct black tip.

The two winter specimens from the Chigmit mountains are without any of the yellowish wash of the skins from the type locality, and the long hairs are mainly pale ashy with faint blackish tips, so that the color is a pale ash-gray. The still paler collar separating the uniform color of head and back is present, as is the dull-gray band across the neck below; otherwise they are colored similarly to the type specimen. All of the specimens have very long pelage as compared with the southern species, and this is especially noticeable in the three specimens from south of Fort Yukon, on which the long dorsal hairs reach an average length of over 22 mm.

*Measurements.*—The following average measurements in millimeters of five dried skins are given merely to serve as an approximation to the true dimensions: Total length, 182; hind foot, 28.3; ear, 19.1 (measured from anterior base).

Compared with *L. princeps* from Idaho and *L. schisticeps* from the Sierra Nevada of California, the following are the most striking external differences: The hairy, strongly marked ears of the Alaskan animal are conspicuously different from the two southern species, both of which latter have the ears thinly covered in front with very short hairs and a much more conspicuous whitish border. On both *schisticeps* and *princeps* the yellowish or fulvous

wash of the upper surface becomes most distinct along the sides bordering the white lower surface, while in *collaris* it is absent in this region and is most conspicuous on the upper surface of head and back. There also appears to be a higher upward extension of the lower white area along the sides of the latter species. The plain gray of the collar below on the Alaskan animal is replaced on the other species by a band of fulvous or yellowish, which is inclined to spread over the adjoining parts and commonly shades nearly or quite all of the lower surface. There is no sign of this in any of the five specimens of *collaris* examined by me. The uniform coloration of the upper surface of the head and back, separated by a differently colored collar, is another marked characteristic of *collaris*.

Contrasted with *L. princeps* and *L. schisticeps*, the most conspicuous cranial character of *collaris* is the much larger size of its audital bullæ. They appear to be larger in every dimension than in the other two species.

The post-palatal notch is broad, as in *schisticeps*, but the palatine bridge is broad and heavy and slightly concave on both borders. The interorbital width is greater than in *schisticeps*. The infra-condylar notch of the mandible is more deeply excavated than in either of the other species. In addition, the angular process is much more strongly upturned and ends in a sharp point rising vertically behind the concavity of the notch. The horizontal ramus of the mandible is slenderer than in *schisticeps* and much as in *princeps* from Idaho.

To the kindness of Mr. F. W. True, Curator of Mammals in the United States National Museum, I am indebted for the opportunity to examine the material on which the present paper is based.

*Skull measurements of three specimens of Lagomys collaris from the type locality, two hundred miles south of Fort Yukon.*

U. S. National Museum number.....	36297	36298	36296
Basilar length of Hensel .....	?	35.5	?
Greatest zygomatic breadth.....	21.5	21.5	?
Interorbital constriction.....	5.25	5.5	5.5